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of which the ordinary grammatical meaning of words would preclude the possibility of the denial of such an apparent necessary improvement. Opposition will, however, no doubt be offered, coming from a scientific party as ignorant of the meaning of the word "anthropology" as they are blind to the important signification of the science, which the word, empty in itself, represents. But if the Fellows of the Anthropological Society and their friends unite strongly to attain this, the first step in the formal recognition of their science in the annual scientific congress of England, and attend at Bath next year in such numbers on the general committee as to impress on the minds of the authorities the desirability of any necessary change, your reporter has no doubt their efforts will be ultimately crowned with success.

Your reporter regrets that many important topics are omitted in this brief report, in which he has been actuated by a desire to give the broad results of his observation at Newcastle in such a form as to indicate the objects for which we must all strive, and not to disguise the amount or nature of the labour which English anthropologists must undergo before their science can be usefully or practically advanced.

C. CARTER BLAKE.

The thanks of the society were given for this report.

Dr. HUNT said he thought there was cause for anthropologists to feel satisfied at the advance that had been made in the scientific tone of section E. It could not be denied that the delegates of the society had a very difficult duty to perform, and were obliged to listen to many most frivolous objections against the recognition of anthropology by name, although in practice the section was obliged to do so. He was glad to know that the chief opposition which they had received did not come, as many might suppose, from Fellows of the Ethnological Society, but rather from persons who had not the least knowledge of ethnology, and were quite incompetent to judge what was required for the progress of a true science of Man.

Professor JOHN MARSHALL, F.R.S., then read a paper on the "Superficial Convolutions of a microcephalic Brain".

[The publication of this paper is postponed.]

Note upon the Opening of a Kist of the Stone-age upon the Coast of Elgin. By GEORGE E. ROBERTS, F.A.S.L.; with a Description of the Skeleton, by Professor BUSK, F.R.S., etc.

SINCE this subject was brought before the notice of the British Association at Newcastle, I have received, through the kindness of my Scotch friends, some notes relating to a prior investigation of the kist, which it will be necessary to mention before proceeding to relate my own observation of it. For it appears most desirable that the fullest record of its discovery and the examination of its contents should be preserved. The Rev. Alexander Leslie writes to me as follows from the Manse of Burghhead, in which parish Bennet hill, where the kists are, is situated:—

"In the month of July last year (1862) I went with my school-master to the Bennet Hill (likely so called from St. Bennet of Pluscar-

dine), to examine the stone kists there, three in number; one, however, had been destroyed by the railway cutting. The remaining two were quite contiguous to each other, and on the same mound. In the one we found nothing but the remains of some bones, but in the other nearly the whole human skeleton. These we removed from the kist, and examined them, then replaced them all (but without any attempt as to their proper or natural position), except the lower jaw, which I took home with me, and which I have now sent to the Rev. Dr. Gordon, of Birnie, for transmission to you. Both kists gave evident tokens of having been previously opened. It is rather strange that there should as yet have been discovered just three kists and three middens, and all these so contiguous to each other as to be only a few yards apart."

The coadjutor of Mr. Leslie in this exploration, Mr. Alexander Jeffrey, of Burghead, thus writes to me respecting his share in the enterprise, and the present (October 24th) condition of the kists:—

"The stone kists now in existence are two in number, and are situated at the extreme eastern end of the hill. They were accidentally discovered some eight or nine years ago. The stones forming the side of the larger kist are respectively 3 feet 10 inches and 3 feet 5 inches in length. This is the kist from which the human skeleton was recently taken. I am not aware that any bones were found in the neighbouring grave. A third kist was come upon by the workmen employed in the railway cutting about twelvemonths ago. It was about the same size as the other two, and was quite empty. The kjökkenmöddings are also two in number, the largest measuring upwards of 50 feet in circumference. Another lies upon the opposite side of the railway cutting. As far as can now be ascertained, no pristine weapons of bronze or iron were ever picked up at Bennet Hill, although flint arrow-heads of beautiful workmanship were found in abundance. Unfortunately, all efforts made towards the re-discovery of these have hitherto failed."

I have also received several communications bearing upon the kist and the middens from the Rev. Dr. Gordon, who remarks that, although there are only three large kjökkenmöddings on the Bennet Hill, there are several smaller ones, a fact which my own observation also proved.

Mr. Leslie transmitted the lower jaw, as stated in this letter, to Dr. Gordon for me, accompanying it with a note, in which he says:

"It is wonderfully complete, with the exception of two or three of the teeth; but their loss is little to be wondered at, considering the voracious appetite of their owner, as proved by the enormous accumulation of a mussel-midden at his door."

The jaw reached me safely, and I have now the pleasure of laying it before you. Mr. Busk, in whose hands I have placed it, does not detect any conformation differing from that of a jaw belonging to a normal brachycephalic cranium; it is apparently that of an individual of twenty-two or twenty-three years of age, corresponding in this particular with the age assigned by him to the skeleton. It may be remarked, however, that indications of considerable antiquity are

stamped upon it, in the large amount of wear which it has suffered. In commenting upon the valuable communications of the Rev. Mr. Leslie and Mr. Jeffrey, I am inclined to doubt the exactness of the measurements of the slabs which formed the walls of the kist, the estimates formed during my visit to it, severally by the party, four in number, giving measurements which I shall afterwards have occasion to mention. Mr. Lubbock has so exactly described the kjökkenmöddings in a late paper (*Natural History Review*, July 1863), that I will not engage the time of this meeting with any detailed account of them. I am glad, however, to be able to add somewhat to his notes. The absence of pottery he comments upon as remarkable. Since his visit two small fragments have been obtained by my friend Dr. Taylor, of Elgin, and Dr. Gordon picked up another during the visit paid with me. This I now exhibit. It is very coarsely burnt, and of the rudest manufacture. The flint weapons referred to by Mr. Jeffrey have again been met with. The indefatigable exertions of Dr. Gordon have resulted in the discovery of five, which he has been good enough to send me, picked up in the midden *nearest* to the kists.

The skeleton left with such singular abstinence by Mr. Leslie was obtained by me while exploring the district in the company of the Rev. Dr. Gordon, his son, and Mr. Harvey Gem. We visited the shell mounds situated upon the sandy dunes of Bennet Hill, a mile from Burghead, and, after examining their contents, we turned our attention to the small cairns of rudely-piled stones, which lie a few yards (inland) from one of the shell-middens, and which evidently mark the burial places of the tribe. Two of these were piled around small inclosed spaces formed by the junction of four upright stones. A fragment of human jaw lying in the sand outside one of these led us to search among its sandy contents for other bones, but unsuccessfully. The second cairn, however, with its central kist, yielded us better evidence. This, like the neighbouring tomb, was a rude erection of four flat sandstone slabs, placed vertically so as to enclose a space 30 inches long by 20 in width. The depth of the stones, which nearly corresponded with that of the grave, was 22 inches. Three of the stones had been slightly smoothed before use.

The cavity thus formed was filled with sand, into which we dug, and presently succeeded in discovering a skeleton, which had apparently been buried in a crouching position, the legs below the knee being bent beneath the hams, and the head bowed towards the knees. The skull was strongly brachycephalic, and presents other peculiarities, which Mr. Busk has described in the valuable note attached to this paper.

From the position of the skeleton, I was at first inclined to consider that no disturbance of it had taken place, but the communications of Mr. Leslie and Mr. Jeffrey are of course conclusive on this point. Unluckily, the box in which the bones were packed suffered a breakage during its transit from Elgin to London, and some of the vertebræ, with other smaller bones, were lost.

The following note upon the skeleton has been contributed by Mr. Busk, F.R.S. :—

"The human bones found by you at Bennet Hill have belonged apparently to a young individual, about 5 feet 8 or 9 inches in height, of slight make, and no great muscular development. At first sight, from the comparative delicacy of form, and want of muscular impressions, one would be inclined to regard them as those of a woman, but if so, she must have been of more than the usual stature. Unfortunately, no part of the pelvis, which would enable a correct judgment as to this point to be formed, is found among the remains. If the owner were a man, he must have been of small size, and, as I have said, not of a strong build, and with a remarkably small head for a male. The cranium is decidedly brachycephalic, the proportions of length to breadth being as 1·00 to ·823, and, for its size, rather unusually high, the proportion of that dimension being to the length as ·808 to 1·00. The forehead is narrow, and the superorbital ridges very slightly projecting, although the frontal sinuses are well developed. Compared with other ancient crania, the present may be regarded, I think, as belonging to the same class as those which have been considered as appertaining to the stone period of the north of Europe. Amongst these, I have selected a few whose dimensions approach nearest to the Bennet Hill skull, and these will perhaps suffice to show how far they all approximate to one type. I have also added the length, and least diameter of the long bones; beyond this they call for no particular remarks. As regards the chemical condition of the bones, it seems to me in some degree remarkable that they should have retained so much as 35·5 per cent. of animal matter. The amount of carbonates is about the same as in recent bone, or perhaps rather more, viz., 10·000, and the bones appear to contain about the usual amount of fluorine found in recent bone. They are slightly impregnated with iron."

I may mention, in conclusion, that a similar kist was opened by Dr. Davis, of Stafford, many years ago, at Roseile, about a mile to the S.E. of the Bennet Hill, and a human cranium and leg bones obtained, probably referable to the age of this skeleton. No doubt others will, ere long, be met with, for kjökkenmöddings are being discovered in numbers along the N.E. seaboard of Scotland, and it is natural to suppose that the graves of the ancient mussel-eaters should accompany the evidences of their occupation during life.

	Length.	Breadth.	Height.	Least frontal width.	Greatest ditto.	Parietal width.	Occipital ditto.	Zygomatic ditto.	Frontal radius.	Vertical radius.	Parietal ditto.	Occipital ditto.	Maxillary ditto.	Nasal ditto.	Circumference.	Longitudinal arc.	Frontal ditto.	Parietal ditto.	Occipital ditto.	Frontal transvers arc.	Vertical ditto.	Parietal ditto.	Occipital ditto.	Proportion of breadth to length.	Do. of height to do.
Bennet Hill ..	6·8	5·6	5·3	3·6	4·5	5·1	4·3	..	4·4	4·35	4·3	3·55	..	3·5	19·4	13·7	4·8	4·6	4·3	11·7	12·3	12·5	11·	828	·808
Danish stone 1	6·85	5·45	5·8	3·8	4·5	4·8	4·5	5·3	4·6	4·8	5·0	3·4	4·0	3·7	19·4	14·3	5·0	5·0	4·3	11·8	13·0	13·2	11·4	·795	·859
Female 2	6·35	5·5	5·5	3·7	4·65	5·3	4·4	4·9	4·5	4·9	4·8	5·8	4·2	3·9	20·4	13·9	4·9	4·7	4·3	13·0	12·6	13·0	10·4	·802	·872

Dimensions of Cranium, compared with those of two belonging to the Stone Period in Denmark, of nearly the same size.

	Length.	Least Diam.
Femur	17·25	0·95
Humerus	12·0	0·7
Radius	9·25	0·45
Clavicle.....	5·5	..

MR. CARTER BLAKE congratulated the Society on having so lucid an account of these remains placed before them, in which the specimens which Mr. Roberts had obtained with such industry and energy had been described by Professor Busk in the most complete manner. As some confusion, however, appeared to exist respecting the signification in which Professor Busk used the words, "strongly brachycephalic," when speaking of a skull whose proportions were $\frac{82.3}{1000}$, he would hint that it would be very convenient if a more minute subdivision of skulls, classified according to length, on the plan of M. Paul Broca, could be adopted. M. Broca, while adhering to Professor Retzius's general classification, arranged certain skulls which he obtained from a cemetery in La Cité, as follows:—

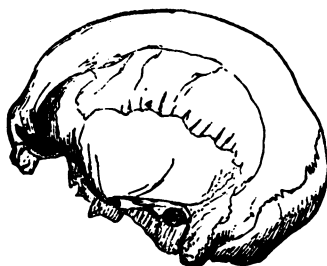
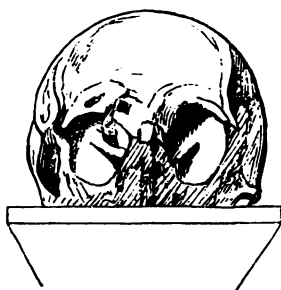
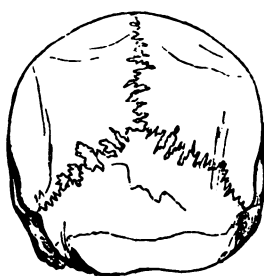
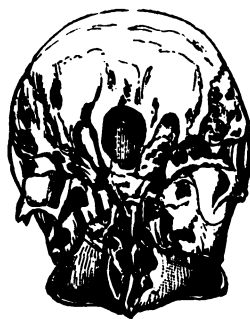
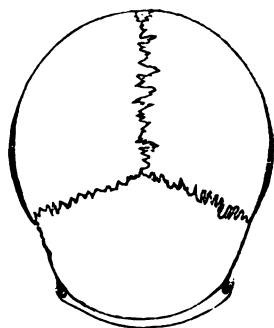
1. *Dolichocephali*. Index smaller than 77·7 per cent.
 - A. *Pure Dolichocephali*. Index smaller than 75 per cent.
 - B. *Subdolichocephali*. Index ranging from 75 to 77·6 per cent.
2. **Mesaticephali*. Index ranging from 77·7 to 79·9 per cent.
3. *Brachycephali*. Index of 80 per cent. and beyond.
 - A. *Subbrachycephali*. Index ranging from 80 to 84·9 per cent.
 - B. *Pure Brachycephali*. Index of 85 per cent. and beyond.

It would be seen that this skull would be classed amongst the subdolichocephali by M. Broca, who reserved the term, pure brachycephali for such skulls as those from Kellet,† in Lancashire, $\frac{85}{1000}$, or from some of the Danish tumuli of the stone period. With respect to the skulls which had been derived from undoubtedly Celtic burial places,‡ by Mr. George Tate, F.G.S., and others, one of them had been described by Dr. Barnard Davis. Its cranial proportion was $\frac{80}{1000}$. To such a skull as this it would be scarcely accurate to apply the term brachycephalic in any other sense than as implying that they presented a short-headed type, which Mr. Tate identifies on evidence of the highest archæological value with that of the Northumbrian Celts. He, however, did not interpret Mr. Tate's observation as implying any hypothetical resemblance between the cranial type of the Northumbrian Celt and that of the more markedly brachycephalic Danish mound builder. He felt confident that the evidence which such observers as Mr. Tate and Mr. Roberts had discovered would speedily

* From *mesátios*, average.

† Geologist, 1862, p. 421.

‡ Anthrop. Review, vol. i, 425. Trans. Berwickshire Naturalists' Field Club, p. 412.



G. Busk del.

THE BENNET HILL SKULL.

place a series of accurate, well-ascertained facts before us, which may hereafter enable us to generalise on the subject, a task we cannot as yet accomplish.

Mr. ROBERTS offered a few remarks on the bones on the table, which had been procured by himself. Three or four kists have since been discovered along the sea-board of the Tarbotness promontory.

PROFESSOR MARSHALL inquired the exact date of the skull?

Mr. ROBERTS replied, that, as the oldest and most indeterminate form of flint implement (the simple flake) was met with, the exact date could not satisfactorily be ascertained.

Mr. A. A. FRASER inquired, whether any larger or better worked flints have been obtained from the same locality, to which Mr. Roberts replied in the negative.

PROFESSOR MARSHALL remarked, that the foramen jugulare was much larger on the right than on the left side, in the Bennet Hill skull, a fact to be accounted for by reason that the right jugular vein went direct to the heart, whilst the left one crossed over indirectly. As the viscera in the body have often been transposed, so that the heart was found on the right side, it was interesting to find that in the Bennet Hill skull no departure from the normal type was visible.

Indian Tribes of Vancouver's Island. By CAPTAIN EUSTACE W. JACOB.

Vancouver's Island is chiefly, if not altogether, inhabited by the Nootka Sound Indians (Flat-heads), speaking the Wakarh language, and falling into the following tribes:—Naspatl; Nootkans proper; Ilaquatsh; Nittenat; Shuswah, or Atna; Kitunaha.

Like other Indian tribes, the Nootka Columbians are a dirty race, living in poor huts formed of planks or logs. The men are slow in their movements, lazy. The legs of the squaws are crooked, giving them when walking a waddling gait, anything but graceful. They are black haired, the locks worn long and flowing; stunted but muscular, both sexes of nearly equal height, with good teeth and fine eyes—treacherous in character. The complexion is a copper-brown, not very dark, some of the women, indeed, are little darker than Europeans: of a far lighter complexion than English gipsies. The language is remarkably guttural, sounding like the clicking of a clock, the voice proceeding entirely from the throat. The travelling dress is usually a blanket, purchased at the Hudson's Bay Company's store, the women carrying their kettle or large round cauldron at their back, attached by a hempen band passed round their forehead. Chinook, a jargon composed of English, French, and Spanish words, strung together without the smallest attempt at grammatical construction, is the medium of communication between these Indians and the white races.

The Nootka Columbians, like other Indian tribes, have no pretension to morals. Many of the women are married, at least to all intents and purposes, to the older residents. Those who live in the neighbourhood of Victoria by concubinage and prostitution, imitate Europeans in dress,